

Applicants : James G. Retzlaff and Scott T. Franson
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IN THE CLAIMS:

Please cancel Claim 36. Please amend Claims 35 and 51 as follows:

1-6. (cancelled).

7. (previously presented) The concealed sprinkler head of claim 55, further comprising a spring positioned between said inner surface and said housing, said spring configured to thrust said cover plate away from said housing.

8. (original) The concealed sprinkler head of claim 7, wherein said spring further comprises a first substantially linear section and a second substantially linear section joined by an arcuate section.

9-28. (cancelled)

29. (previously presented) A concealed sprinkler head comprising:

a sprinkler body having a central axis and a central orifice disposed about said central axis, said central orifice defining an inlet and an outlet, and said inlet configured for attachment to a fire extinguishing fluid supply line;

a deflector movably mounted to said sprinkler body;

a sealing assembly for sealing said outlet;

a thermally sensitive trigger assembly configured to releasably urge said sealing assembly into sealing engagement with said outlet;

a housing attached to said sprinkler body and having a bottom extending beyond said outlet, said thermally sensitive trigger assembly positioned between said outlet and said bottom of said housing; and

a cover plate removably mounted to said bottom of said housing, said cover plate having a central portion and a periphery extending around said central portion, said central portion having an outer surface lying in a plane generally orthogonal to said central axis, said plate further including arcuate portions extending inwardly from said periphery to said central portion, said arcuate portions projecting outwardly from said plane away from

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said sprinkler body in a direction generally along said central axis and forming a plurality of radially spaced and radially extending passageway sections having portions offset outwardly from said plane and in said direction and configured to enable air to travel between said periphery and said bottom of said housing and towards the thermally sensitive trigger assembly.

30. (previously presented) The concealed sprinkler head of claim 29, wherein said cover plate has generally planar portions extending between said arcuate portions.

31-33. (cancelled)

34. (original) The concealed sprinkler head of claim 29, further comprising a spring positioned between said cover plate and said bottom of said housing, said spring configured to thrust said cover plate away from said bottom of said housing.

35. (currently amended): A concealed sprinkler head comprising:

a sprinkler body having a central axis and central orifice disposed about said central axis, said central orifice defining an inlet and an outlet, said inlet configured for attachment to a fire extinguishing fluid supply line;

a deflector movably mounted to said sprinkler body;

a sealing assembly for sealing said outlet;

a thermally sensitive trigger assembly configured to releasably urge said sealing assembly into sealing engagement with said outlet;

a housing attached to said sprinkler body and having a bottom extending beyond said outlet, said thermally sensitive trigger assembly positioned between said outlet and said bottom of said housing; and

a cover plate removably mounted to said bottom of said housing, said cover plate having an inner surface facing said housing, an outer surface having planar portions, and a periphery, other portions of said plate projecting outwardly in a direction generally along said central axis away from said housing, said other portions forming passageway sections extending inwardly from said periphery to enable air to travel between said

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periphery and said bottom of said housing and towards said thermally sensitive trigger assembly, wherein said cover plate has an annular perimeter portion comprising an undulating outer surface forming a plurality of radially spaced undulations, and said undulations forming said passageway sections.

36-47. (cancelled)

48. (previously presented) The concealed sprinkler head according to Claim 55, wherein said cover plate has an undulating surface, said undulating surface defining said plurality of radially spaced arcuate portions.

49. (previously presented) The concealed sprinkler head according to Claim 55, further comprising a plurality of radially spaced generally planar portions extending inwardly from said perimeter edge and disposed between said radially spaced arcuate portions.

50. (previously presented) The concealed sprinkler head according to Claim 49, wherein said planar portions extend inwardly from said peripheral edge to said central planar portion.

51. (currently amended) The concealed sprinkler head according to Claim [[36]] 35, further comprising generally planar portions extending between said passageway sections.

52. (previously presented) The concealed sprinkler head according to Claim 30, wherein said planar portions extend between said periphery and said central portion.

53. (previously presented) The concealed sprinkler head according to Claim 29, wherein said central portion comprises a generally planar central portion.

54. (previously presented) The concealed sprinkler head according to Claim 35, wherein said other portions comprise arcuate portions.

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55. (previously presented) A concealed sprinkler head comprising:
 a sprinkler head body having an outlet opening and a central axis, said outlet opening disposed about said central axis;
 a housing mounted to said sprinkler head body and having a central passageway in communication with said outlet opening;
 a thermally sensitive trigger assembly operative to open and close said outlet opening; and
 a cover plate mounted to said housing, said cover plate having a generally planar central portion, a perimeter portion extending around said planar central portion, and a peripheral edge extending around said perimeter portion, said cover plate further including an inner surface facing said housing and an outer surface, said planar central portion lying in a plane generally orthogonal to said central axis, said perimeter portion having a plurality of radially spaced arcuate portions extending between said central portion and said peripheral edge, said arcuate portions projecting outwardly from said plane to form a plurality radially spaced passageways extending inwardly from said peripheral edge to enable air to travel from said peripheral edge toward said thermally sensitive trigger assembly.